FILMS OF MAORI LIFE TO BE SHOWN MAY 6

"The Maori as He Was," an official motion picture made under the auspices of the Commonwealth of New Zealand, will be presented in a special showing in the James Simpson Theatre of Field Museum on Saturday afternoon, May 6, at 3 o'clock, as a supplement to the Spring Lecture Course which ended April 29. These films give an exceptionally fine exposition of the life of these primitive people and bear complete explanatory captions to tell their story. The many strange customs of the Maori, who are among the most interesting of aboriginal peoples, are vividly illustrated in these unique pictures.

Admission is free, and Members of the Museum are cordially invited to attend. No tickets are necessary. A section of the Theatre is reserved for Members of the Museum, each of whom is entitled to two reserved seats on request. Requests for these seats may be made by telephone or in writing to the Museum in advance, and seats will then be held in the Member's name until 3 o'clock on the day of the program. Members may obtain seats in the reserved section also by presentation of their *membership cards* to the Theatre attendant before 3 o'clock, even though no advance reservation has been made. All reserved seats not claimed by 3 o'clock will be opened to the general public.

PAPER-MAKING MATERIALS

By Llewelyn Williams
Assistant in Wood Technology

The papyrus of the Egyptians, from the name of which the word "paper" is derived, dates from the time of Alexander the Great, about 350 B.C. It was made from a tall, aquatic sedge. The central part of the stem was cut into thin slices, spread out, and moistened. On this a second layer was placed crosswise to form a sheet of convenient size. The Japanese to this day, by slicing the pith of the stem of an *Aralia*, produce a similar thin white sheet used as a "paper" for special purposes.

In Hall 28 there is exhibited a primitive outfit from Siam used for making paper by hand from Khoi bark. The equipment consists of a mallet for beating the bark into pulp, and a wooden frame covered with cloth. On this frame a mixture of pulp in water is carefully spread until a sufficient layer is deposited to form the thickness desired. A wooden roller is then passed over the pulp to squeeze out excess water, and the frame is set in the sun until the paper is sufficiently dry for removal.

The method of making paper by hand in other countries does not differ greatly from this, and, irrespective of raw material employed, the general process of modern paper-making, with all its refinements and use of machinery, remains similar in principle. By mechanical or chemical treatment, or both, the fibers are separated from each other and thoroughly beaten up with water into a cream-like pulp. This is run out in a thin, even layer on a screen of fine wire cloth. On drying, the solid matter, consisting of interlaced fibers, forms a sheet of paper.

Thus, paper is essentially a sort of felt made from vegetable fiber. Non-vegetable fillers may enter into the pulp, and the sheets may be variously treated or calendered by pressing between rollers or by sizing, but the quality of the paper depends mainly upon the fibrous material used. The most important kinds of plant material used for paper-making are shown in three cases in Hall 28.

The art of making paper from pulp originated in China more than 1,800 years ago, and gradually passed westward through the Mohammedan world into Europe. Towards the end of the eleventh century paper-makers of Spain began to use linen rags, and for a long time these were the principal material used in Europe. The earliest known paper-mill in America was established in 1690 at Roxburgh, near Philadelphia, on a stream known as Paper-mill Run, by William Rittinghuysen. He used linen rags as raw material.

The French physicist Réaumur (1683–1757) is said to have been the first to conceive the possibilities of producing paper from wood when he realized that the nest of the paper wasp consists of wood fiber. Today wood is the most commonly employed material, about 80 per cent of all paper produced in this country being made from it. Basswood was the first wood used in Europe, but eventually spruce became the leading pulp wood.

In the early years of the pulpwood industry the wood was simply cut and ground into pulp. It was soon discovered, however, that the separation of the wood elements could be aided by chemical means, and so-called chemical wood-pulp is now most commonly used. According to the chemical agent employed the three principal methods are known respectively as the sulphite, sulphate, and soda processes.

SPECIAL NOTICE

Members of the Museum who have changed residences or plan to do so are urged to notify the Museum of their new addresses, so that FIELD MUSEUM NEWS and other communications may reach them promptly.

Members going away during the summer, who desire Museum matter sent to their temporary addresses, may have this service by notifying the Museum.

Chinese Cloisonné Ware

An exhibit of rare Chinese cloisonné ware, some dating back as far as the thirteenth century, has been installed in George T. and Frances Gaylord Smith Hall (Hall 24). Included are some of the most beautiful and intricately designed pieces in existence, in the opinion of Dr. Berthold Laufer, Curator of Anthropology. Among these is a remarkable cloisonné enamel statue of the great religious dignitary Pal-dan Ye-she, known as the Tashi Lama of the Buddhist church of Tibet. This statue, made in the eighteenth century when cloisonné art was at its zenith in China, is a gift from Stanley Field, President of the Museum. A large and unusual jar of the fifteenth century, presented by Trustee William J. Chalmers, is another outstanding piece.

Other objects shown were obtained by the Blackstone Expedition to China. Some of the later examples illustrate the aptitude of Chinese artists in copying designs of French origin.

A beautiful model of the Taj Mahal is exhibited in Hall E.

Ornamental minerals constitute a special exhibit in the Department of Geology.

MAY GUIDE-LECTURE TOURS

Conducted tours of exhibits, under the guidance of staff lecturers, are made every afternoon at 3 P.M., except Saturdays, Sundays, and certain holidays. Following is the schedule of subjects and dates for May:

Week beginning May 1: Monday—Skeletons, Past and Present; Tuesday—Musical Instruments; Wednesday—Habitat Groups; Thursday—General Tour; Friday—China and Tibet.

Week beginning May 8: Monday—Peat, Coal and Oil; Tuesday—Snakes and Lizards; Wednesday—Rare Birds; Thursday—General Tour; Friday—Pewter and Jade.

Week beginning May 15: Monday—Egyptian Exhibits; Tuesday—Primitive Pottery; Wednesday—Animal Life of the Chicago Region; Thursday—General Tour; Friday—Masks.

Week beginning May 22: Monday—Work of Heat, Wind and Water; Tuesday—Hall of Prehistoric Life; Wednesday—Wood and Its Uses; Thursday—General Tour; Friday—The Story of Man.

Week beginning May 29: Monday—Animal Life of Eurasia; Tuesday—Memorial Day holiday, *no tour;* Wednesday—Hall of Plant Life.

Persons wishing to participate should apply at North Entrance. Tours are free and no gratuities are to be proffered. A new schedule will appear each month in FIELD MUSEUM NEWS. Guide-lecturers' services for special tours by parties of ten or more are available free of charge by arrangement with the Director a week in advance.

Gifts to the Museum

Following is a list of some of the principal gifts received during the last month:

From the Mengel Company—a board of Honduras mahogany; from Dr. Earl E. Sherff—160 herbarium specimens, Hawaiian Islands; from Dr. H. W. von Rozynski—348 herbarium specimens, Mexico; from Ichabod T. Williams and Sons—a board of Peruvian mahogany; from Museo Nacional—165 herbarium specimens, Costa Rica; from Crystal Fluorspar Company—a specimen of fluorite, Illinois; from James H. Quinn—13 specimens of Upper Miocene mammals, Nebraska; from L. S. Pyle—a specimen of *Orthoceras annulatum* in matrix, Illinois; from Walker Museum, University of Chicago—4 lizards, 2 turtles, and 16 skulls and 4 shells of land turtles, Galapagos Islands; from Museum of Comparative Zoology—an alligator, Florida; from Dr. Orlando Park—5 insects, Illinois, Louisiana, and New Mexico; from F. J. W. Schmidt—3 salamanders, 3 frogs, 3 snakes, and 12 lizards, Wisconsin; from Dr. Wilhelm Filchner—18 reels of motion pictures of Tibetan dancers.

NEW MEMBERS

The following persons were elected to membership in Field Museum during the period from March 16 to April 17:

Associate Members

Miss Jessie Colvin, Mrs. Henry K. Friend, Rudolph F. Kelker, Jr., William Reach, Marcus D. Richards.

Annual Members

Mrs. George Adams, George G. Arnold, H. H. Bryan, F. D. Carpenter, Fred Y. Coffin, Robert Cunningham, William S. Deree, Mrs. Arnold Epstein, Mrs. H. B. Erminger, Jr., Mrs. Sol. H. Goldberg, Mrs. T. R. Gowenlock, Mrs. O'Bannon L. Huffaker, George D. Ladd, Mrs. Herbert Ross Landes, Miss Mary J. Lawson, Herman J. Mayer, Jr., Mrs. V. C. Sanborn, Miss H. Gertrude Strain.

Origin of Henna

Henna is derived from the leaves of a shrub, the sweet-smelling camphire of Solomon (*Lawsonia alba*) of the loosestrife family (Lythraceae). It is cultivated extensively in the Orient, and the ground leaves form an article of commerce for use as a dye and cosmetic. In ancient Egypt it was employed for staining the finger nails and throughout the centuries it has retained its popularity as a hair dye. It is one of the vegetable dyes shown in Hall 28.

Activities of the James Nelson and Anna Louise Raymond Foundation of the Museum are benefiting more than 250,000 children annually.

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